IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) An image processing device comprising:

an input ~~means~~circuit for inputting ~~an~~ a digital image wherein one or more color components are non-existent in each pixel, obtained from one of a single-sensor image-pickup system, a double-sensor image-pickup system, ~~or~~ and a triple-sensor pixel spatial offset image-pickup system;

a combination average ~~calculation means~~calculator for ~~making a combination of~~combining two or more pixels from a plurality of pixels having ~~the same color component~~ similar color components near ~~the~~ a pixel of interest within ~~the~~ image signals input from the input ~~means~~circuit, and calculating ~~the~~an average for the combination of ~~the~~ color components of two or more pixels for a plurality ~~kinds~~ of combinations of different pixels in ~~the~~a region near the pixel of interest;

a color correlation ~~estimation means~~ estimator for estimating color correlation which is a correlation between different color components within the region near the pixel of interest; and

a combination ~~selection means~~selector for selecting one of the plurality of combination averages calculated by the combination average ~~calculation means~~calculator, as ~~the~~a non-existent color component for the pixel of interest, based upon the color correlation estimated by the color correlation ~~estimation means~~estimator.

2. (Currently Amended) The image processing device according to Claim 1, wherein the combination average ~~calculation means~~calculator further calculates ~~the~~ fluctuation of the color component within the combination of two or more pixels;

and wherein the color correlation ~~estimation means~~estimator further calculates ~~the~~a reliability of the estimated color correlation; and

wherein, in the event that the reliability calculated by the color correlation ~~estimation means~~estimator is high, the combination ~~selection means~~selector estimates the non-existent color component for the pixel of interest based upon ~~the~~ estimation results of the color correlation and the color component obtained in the pixel of interest, and selects the combination average which is ~~the~~ closest to the estimated non-existent color component candidate as the non-existent color component, and in the event that the reliability is low, the combination ~~selection means~~selector selects the combination average corresponding to the combination wherein ~~the~~ fluctuation of the color component calculated by the combination average ~~calculation means~~calculator is ~~the~~ least, as the non-existent color component.

3. (Currently Amended) An image processing device comprising:

an input ~~means~~circuit for inputting ~~an~~ a digital image wherein one or more color components are non-existent in each pixel, obtained from one of a single-sensor image-pickup system, a double-sensor image-pickup system, ~~or~~ and a triple-sensor pixel spatial offset image-pickup system;

a first non-existent color component ~~generating means~~generator for making a ~~combination of~~ combining two or more pixels from a plurality of pixels having ~~the same~~a similar color component near ~~the~~a pixel of interest within ~~the~~ image signals input from the input ~~means~~circuit, calculating ~~the~~an average for ~~the~~each combination ~~the~~ of color components of two or more pixels for a plurality ~~kinds~~ of different combinations in ~~the~~a region near the pixel of interest, and selecting one of the calculated averages ~~so~~ as ~~to generate the~~a first non-existent color component;

a second non-existent color component ~~generating means~~generator for estimating ~~the~~a color correlation which is a correlation between different kinds of color components near the pixel of interest for each pixel, and generating ~~the~~a second non-existent color component based upon the estimated color correlation and the color component obtained in each pixel;

~~evaluation means~~ an evaluator for evaluating ~~the~~ reliability of the color correlation estimated by the second non-existent color component ~~estimation means~~estimator; and

a third non-existent color component ~~generating means~~generator for setting ~~the~~a weight ~~as to the non-existent color component generated by~~of the second non-existent color component ~~generating means~~ based upon the reliability evaluated by the ~~evaluation means~~evaluator, and calculating ~~the~~a weighted average for the first non-existent color component and the second non-existent color component ~~generated by the first non-existent color generating means and the non-existent color component generated by the second non-existent color component generating means~~ using the ~~set~~ weight, thereby generating ~~the~~a non-existent color component value.

4. (Currently Amended) The image processing device according to Claim 3, further comprising a region judgment ~~means~~judging device for ~~making judgment~~determining whether or not the region near the pixel of interest is a texture region, and ~~also making judgment~~determining whether or not the region near the pixel of interest is an edge region, wherein, in the event that judgment is made by the region judgment ~~means~~device that the region is a texture region, ~~the~~ evaluation of the reliability is increased, and conversely in the event that judgment is made that the region is an edge region, ~~the~~ evaluation of the reliability is decreased.

5. (Currently Amended) An image processing program for inputting ~~an~~ a digital image wherein one or more color components are non-existent in each pixel, obtained from one of a single-sensor image-pickup system, a double-sensor image-pickup system, ~~or~~ and a triple-sensor pixel spatial offset image-pickup system, estimating the non-existent color component for each pixel so as to output a color digital image, the program comprising:

~~step for~~ combination average calculation processing for ~~making a combination of~~combining two or more pixels from a plurality of pixels having ~~the same~~a similar color component near ~~the~~ a pixel of interest, and calculating ~~the~~ an average for ~~the~~each combination of the color components of two or more pixels for a plurality ~~kinds~~ of different combinations of pixels in ~~the~~a region near the pixel of interest;

~~step for~~ color correlation estimation processing for estimating color correlation which is a correlation between different color components within the region near the pixel of interest; and

~~step for~~ combination selection processing for selecting one of the plurality of combination averages calculated by the combination average calculation processing, as the non-existent color component for the pixel of interest, based upon ~~the~~ color correlation estimated by the color correlation estimation processing.

6. (Currently Amended) The image processing program according to Claim 5, wherein the combination average calculation processing further includes processing for calculating ~~the~~ fluctuation of the color component within the combination of two or more pixels;

and wherein the color correlation estimation processing further includes ~~for~~ calculating ~~the~~ reliability of the estimated color correlation;

and wherein in the event that the reliability calculated by the color correlation estimation processing is high, the combination selection processing estimates the non-existent color component candidate for the pixel of interest based upon the estimation results of the color correlation and the color component obtained in the pixel of interest, and selects the combination average which is ~~the~~ closest to the estimated non-existent color component candidate as the non-existent color component, and in the event that the reliability is low, the combination selection processing selects the combination average corresponding to the combination wherein ~~the~~ fluctuation of the color component calculated by the

combination average calculation processing is ~~the~~ least, as the non-existent color component.

7. (Currently Amended) An image processing program for inputting ~~an~~ a digital image wherein one or more color components are non-existent in each pixel, obtained from one of a single-sensor image-pickup system, a double-sensor image-pickup system, ~~or~~ and a triple-sensor pixel spatial offset image-pickup system, estimating the non-existent color component for each pixel so as to output a color digital image comprising:

~~step for first~~ initial non-existent color component generating processing for ~~making a combination of~~combining two or more pixels from a plurality of pixels having the same color component near ~~the~~ a pixel of interest, calculating ~~the~~ an average for ~~the~~ each combination of ~~the~~ color component values of two or more pixels for a plurality ~~kinds~~ of different combinations of pixels in the region near the pixel of interest, and selecting one of the calculated averages ~~so~~ as ~~to generate~~ the non-existent color component;

~~step for~~ second non-existent color component generating processing for estimating the color correlation which is a correlation between different kinds of color components near the pixel of interest for each pixel, and generating the non-existent color component based upon the estimated color correlation and the color component obtained in each pixel;

~~step for~~ evaluation processing for evaluating ~~the~~ reliability of the color correlation estimated by the second non-existent color component estimation processing; and

~~step for~~ third non-existent color component generating processing for ~~setting the~~assigning a weight ~~as~~ to the non-existent color component generated by the second non-existent color component generating processing based upon the reliability evaluated by the evaluation processing, and calculating ~~the~~a weighted average for the non-existent color component generated by the ~~first~~initial non-

existent color generating processing and the non-existent color component generated by the second non-existent color component generating processing using the set weight, thereby generating the non-existent color component value.

8. (Currently Amended) The image processing program according to Claim 7, further comprising region judgment processing for ~~making judgment~~determining whether or not the region near the pixel of interest is a texture region, and also ~~making judgment~~determining whether or not the region near the pixel of interest is an edge region, wherein in the event that judgment made by the region judgment processing is that the region is a texture region, ~~the~~ evaluation of the reliability is increased, and conversely in the event that judgment is made that the region is an edge region, ~~the~~ evaluation of the reliability is decreased.